Group II: Claims 1 to 7 and 10 to 20, directed to methods of differentiating progenitor cells and methods of differentiating hematopoietic progenitor cells;

Group III: Claim 21, directed to a method of transplantation;

Group IV: Claims 22 to 30, 33 and 34, directed to isolated stem cells;

Group V: Claims 31 and 32, directed to isolated embryonic stem cells;

Group VI: Claims 35 to 37, directed to isolated hematopoietic stem cells;

Group VII: Claims 38 to 41, directed to methods of identifying a protective or differentiation gene;

Group VIII: Claims 42 to 49, directed to methods of identifying a protective gene *in vitro;* and

Group IX: Claims 50 to 57, directed to methods of identifying a differentiation gene *in vitro*.

ELECTION OF INVENTION

Applicants respectfully traverse the Restriction Requirement for the reasons stated below. Nevertheless, in order to be responsive to the Office Action, Applicants provisionally elect the invention of Group I, claims 1 to 9 and 12 to 20, for examination.

REGARDING REJOINDER OF GROUPS I AND II

The Restriction Requirement is traversed with respect to the division of Group II from Group I. Both Groups I and II are drawn to methods of differentiating progenitor cells. Group I only differs from Group II in that the methods of Group I employ embryonic stem cells, while the methods of Group II employ hematopoietic progenitor cells.

Applicants respectfully point out that the claims of Group I and the claims of Group II are both classified in class 435, subclass 377. Furthermore, the steps of these methods are identical. Applicants further submit that a thorough search of the subject matter of Group I, directed to a method of differentiating progenitor cells, likely would uncover art relevant to both embryonic stem cells and hematopoietic progenitor cells. Thus, there would be no burden on the Examiner to search and examine claims 1 to 20 together in their entirety.

Applicants respectfully remind the Examiner that two separate requirements must be met in order for restriction to be

proper. First, the inventions must be independent or distinct. Secondly, there must be a serious burden on the Examiner if restriction is required. See, for example, MPEP 803 (Restriction- When Proper), which states, in part:

> If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

Page 800-3; emphasis added.

Thus, it is not sufficient for an Examiner to assert that patentably distinct inventions are present in order to restrict an application. There also must be a serious burden on the Examiner to search and examine the restricted claims.

As set forth above, Applicants assert that the Examiner would not be seriously burdened to search and examine together the methods of Groups I and II, which have identical steps. Accordingly, Applicants respectfully request that the Examiner reconsider the Restriction Requirement and rejoin Groups I and II.

REGARDING REJOINDER OF GROUP III WITH GROUP I

Applicants further respectfully request that the Examiner reconsider and rejoin the single claim of Group III (claim 21) with the claims of Group I. In particular, claim 21 contains the elements and preamble of claim 1 of Group I, further

reciting an additional step c: "transplanting cells comprising a nucleic acid molecule encoding a MEF2 polypeptide or an active fragment thereof into a patient to produce a cell population containing protected neuronal cells in said patient." Applicants submit that, should elected claim 1 be searched and found clear of the prior art, claim 21 of Group III, which contains all the elements of claim 1, also must be clear of the prior art. Given that claim 21 depends upon Group I, it would represent very little additional work to examine claim 21 with the claims of Group I, such as claim 1. In the absence of a serious burden on the Examiner, as in this case, such restriction is improper. Rejoinder of Group III (claim 21) with the claims of Group I is therefore respectfully requested.

REGARDING REJOINDER OF GROUPS IV TO VI

Applicants further submit that Groups IV to VI should be examined together. In particular, while the claims of Groups IV to VI are patentably distinct, Applicants submit that a thorough search of, for example, the claims of Group IV, directed to an isolated stem cell containing an exogenous nucleic acid molecule encoding a MEF2 polypeptide or active fragment thereof, likely will result in art relevant to examination of the methods of Groups V and VI, in which the stem cell is an embryonic stem cell or a hematopoietic stem cell. In sum, a thorough search of the methods of Group IV likely will result in art relevant to examination of the methods of Groups V and VI such that little additional work would be required to examine these claims. Again, Applicants respectfully remind the Examiner that there

must be a serious burden on the Examiner in order for restriction to be proper. In the present case, there is no serious burden, and the claims of Groups V and VI should be examined together with the claims of Group IV. Accordingly, Applicants respectfully request that Groups IV to VI be rejoined.

II. CONCLUSION

In view of the remarks submitted herein, Applicants provisionally elect the claims of Group I. Applicants further request that the Examiner reconsider the Restriction Requirement and also examine the claims of Groups II and III together with the elected claims of Group I. It further is requested that the Examiner reconsider the Restriction in regard to the division of Groups IV to VI from eachother.

The Examiner is invited to call the undersigned agent or Cathryn Campbell if there are any questions regarding this application.

Respectfully submitted,

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